Abstract

The invention is a device for coupling ultrasonic waves into a medium via a boundary surface, including at least one ultrasonic-wave transducer unit, which couples ultrasonic waves into the medium via a coupling medium provided between the ultrasonic-wave-generating unit and the boundary surface. The ultrasonic waves generated by the ultrasonic transducer unit are directed into a closed volume, which is provided with at least a first opening and a second opening. A flow of gas, ensures an overpressure inside the closed volume and simultaneously is the coupling medium. The flow of gas is directed into the interior of the volume through the first opening and exits the second opening which directly faces the boundary surface.